

A NAME CHANGE FOR LYCOPODIUM FLABELLIFORME

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The epithet *flabelliforme* is firmly established in the literature concerning North American lycopods. It has, with one exception (Nessel, 1939), gone unchallenged since it was first described as a variety of *Lycopodium complanatum* by Fernald in 1901. With these facts in mind we decided to examine the nomenclatural change proposed by Holub (1975a). Our investigation showed that the epithet *flabelliforme* is not only incorrect at the specific level but at the varietal level as well. The present article reviews some of the nomenclatural history of the taxon and gives what we believe to be its complete synonymy.

In 1741, Dillenius published a plate (Figure 1) and an excellent description of a lycopod obtained from John Bartram of Pennsylvania. This plant, *Lycopodium digitatum foliis arboris vitae, spicis bigemellis teretibus*, now commonly goes by the name *L. flabelliforme* (Fern.) Blanchard (Wilce, 1965). As pointed out by Holub (1975b), however, the correct name for this species is *L. digitatum* A. Braun. Unfortunately, Braun's binomial was inconspicuously published in a footnote to a paper by Kunze (1848). Later authors (Marie-Victorin, 1925; Holub, 1975 a, b) have further obscured this combination through incorrect literature citations.

Marie-Victorin (1925) was the first author to consider *Lycopodium digitatum* as an alternative name for *L. flabelliforme*. He rejected it, arguing that the condensation of a prelinnaean adjectival phrase and the lack of both an explicit literature citation and a description made Braun's combination unacceptable. Some fifty years later, Holub (1975a) took up Braun's name as the basionym for the combination *Diphasiastrum digitatum* (A. Braun) Holub. Holub (1975b) reasoned that according to Article 32 of the International Code of Botanical Nomenclature (Stafleu, 1972) the reference "Dillen." in the authority citation of Braun's binomial constituted an indirect reference to a previous and effectively published description.

In 1857, Döll compared the plant pictured in Dillenius' plate LIX with the European varieties of *Lycopodium complanatum* and stated that "Diese varietas *Dilleniana* ist bis jetzt nur in America beobachtet worden. . . ." This mention of a variety *Dillenianum*

constitutes valid publication for precisely the same reasons advanced by Holub (1975b) for *L. digitatum*. Fernald's name, *L. complanatum* var. *flabelliforme*, and the subsequent elevation of it to species level by Blanchard (1913) are both predated by earlier names and are therefore both incorrect.

When treated as a species, the correct name is *Lycopodium digitatum* and when treated as a variety of *L. complanatum* it must be called *L. complanatum* var. *Dillenianum*. The complete synonymy of this taxon (grouped by basionym) is as follows:

***Lycopodium digitatum* A. Braun**

Lycopodium digitatum A. Braun, Am. J. Sci. & Arts, ser. II, 6: 81. 1848; *L. complanatum* var. *digitatum* (A. Braun) Nessel, Die Bärlappgewächse, p. 335. 1939; *L. chamaecyparissus* var. *digitatum* Nessel, Die Bärlappgewächse, p. 335. 1939, *pro syn*; *Diphasiastrum digitatum* (A. Braun) Holub, Preslia, Praha 47: 108. 1975. LECTOTYPE: plate LIX in Dillenius, Historia Muscorum, 1741 (see below).

Lycopodium complanatum var. *Dillenianum* Döll, Fl. Gross. Bad. p. 80. 1857, as "*Dilleniana*"; *L. Dilleniana* Nessel, Die Bärlappgewächse, p. 333. 1939, *pro syn*. LECTOTYPE: plate LIX in Dillenius, Historia Muscorum, 1741 (see below).

Lycopodium complanatum var. *flabelliforme* Fern., Rhodora 3: 280. 1901; *L. flabelliforme* (Fern.) Blanchard, Rhodora 13: 168. 1911; *L. complanatum* ssp. *flabelliforme* (Fern.) Clausen, Am. Fern J. 35: 17. 1945; *Diphasium anceps* ssp. *flabelliforme* (Fern.) Löve & Löve, Nucleus 1: 7. 1958. *Diphasium flabelliforme* (Fern.) Rothm., Fedde, Rep. Spec. Nov. 66: 235. 1962; *Diphasium complanatum* ssp. *flabelliforme* (Fern.) Löve & Löve, Univ. Colorado Stud., Biol. Ser. 17: 4. 1965. LECTOTYPE: Vermont, Manchester, Day 219 (GH!), selected by Wilce, 1965.

From the comments made by both Döll (1857) and Braun (in Kunze, 1848) it is obvious that both these authors were aware of and relied heavily on Dillenius' plate LIX and the accompanying description for their understanding of this taxon. Since Dillenius' plate (Figure 1) is so diagnostic (note the superficial rhizome, the regularly fan-shaped lateral branches, the wide, ultimate branchlets without annual constrictions, and the four strobili per peduncle, often with sterile tips) that there can be no doubt as to the plant he was describing, and since there are no other references in either work or cited specimens from which to select a lectotype, we choose plate LIX as lectotype for both *Lycopodium digitatum* and *L. complanatum* var. *Dillenianum*.

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